

REMARKS

Claims 1, 4-10, 13-16, 18-24, 26-31, 34-57, 60-65, and 74 were subject of the final Office Action dated March 2, 2009. Claims 30, 31, 34-57, and 60-65 were withdrawn from consideration. Thus, claims 1, 4-10, 13-16, 18-24, 26-29, and 74 were examined on the merits. These claims are again presented for further consideration.

Claims 1 and 74 now specify a maximum emulsion level to improve the clarity of the claims. Basis can be found in paragraph 85 of the published application (US 20050037109).

Response to Rejections under 35 USC §112, first and second paragraphs

Claims 1, 4-10, 13-16, 18-24, 26-29, and 74 stand rejected as being indefinite and as lacking an adequate written description in light of the use of the terms continuous / without interruption. The office action acknowledges that paragraph 9, for example, of the specification provides support for such operation within an intended time frame. Claims 1 and 74 now specify "for a period of time"; additional basis for such language can be found in paragraph 81, for example.

In light of the foregoing, these rejections should be rendered moot.

Response to Rejection under 35 U.S.C. § 102

Claims 1, 4-7, 14, 21, 22, and 74 stand rejected as being anticipated by U.S. Patent No. 4,212,889 ("Fuentevilla"). The applicants respectfully traverse this rejection.

Claims 1 and 74 now clarify that the apparatus maintains an even and continuous flow of the reaction mixture. Basis can be found in paragraph 153 of the published specification.

As described throughout the specification, the subject apparatuses control emulsion formation by minimizing vigorous or turbulent mixing or processing. *See e.g.* paragraphs 37, 71, 112, 141 ("low sheer forces with a substantially slow rotation"), 146 (low speed), and 162 (moderate agitation and controlled emulsification), for example. Claim 74 accordingly also now specifies that emulsification is minimized.

Advantages of gentle, continuous, and even processing of the subject apparatuses include elimination of bitter flavor and more uniform-sized resulting peptides in the end products. *See e.g.* paragraph 136 of the published application. Advantages of a product lacking off / objectionable flavors are clear, as are disadvantages of over and/or under-processed raw materials.

Fuentevilla is silent regarding such advantages, and Fuentevilla teaches a process using variable speeds and directions. As the subject application teaches (*see e.g.* paragraph 136), such processes are inferior. Such a process is not "even and continuous." Thus, Fuentevilla is in this sense a batch process, in that there is forwards and backwards processing until the entire batch is satisfactorily (according to Fuentevilla anyway) processed.

Column 4, line 47 of Fuentevilla discusses "feed forward," while column 5 (lines 33, 39, 42 (line 51 is back to feed forward), 61, and 66) discusses feed backward flow. Column

6 likewise discusses feed forward (lines 34, 43, 46, and 48, for example) and feed backward (lines 7, 39, and 47, for example).

Furthermore, Fuentevilla states in column 4, lines 19-24, that the speed of the transfer pump increases with the intensity of the signal from the previous vessel when the previous vessel is over-filled. That is the problem being addressed by Fuentevilla. In so doing, Fuentevilla is trying to minimize the size of the apparatus in order to minimize set-up costs (that is, larger units are more expensive). Distasteful, non-uniform end product is not even identified as a problem by Fuentevilla, so it could not possibly teach what the subject application now provides as means for addressing those problems and improving the end product, for example.

Fuentevilla likewise does not appear to address or mention emulsification. Claims 1 and 74 specify a maximum emulsification level, and claim 74 specifies that emulsification is minimized.

Clearly, what is claimed in the present application is different from what is taught by Fuentevilla. For example, Fuentevilla teaches processing using altered speed and direction. Such flow is not even and continuous. Thus, the withdrawal of this anticipation rejection is respectfully requested.

Response to Rejection under 35 U.S.C. § 103(a) in light of Fuentevilla

Claims 8, 18, 20, 23, 24, and 26-29 stand rejected as being obvious over U.S. Patent No. 4,212,889 ("Fuentevilla"). The applicants respectfully traverse this rejection.

The comments above regarding the anticipation rejection should also help to address this rejection. Again, claims 1 and 74 now clarify that the apparatus maintains an even and continuous flow of the reaction mixture. As described throughout the specification, the subject apparatus controls emulsion formation by minimizing vigorous or turbulent mixing or processing. Claim 74 accordingly also now specifies that emulsification is minimized.

Advantages of gentle processing of the subject apparatuses include elimination of bitter flavor and more uniform-sized resulting peptides in the product. Advantages of a product lacking off / objectionable flavors and over and/or under-processed proteins are clear.

Fuentevilla is silent regarding such advantages, and Fuentevilla teaches a process using variable speeds and directions. As the subject application teaches, such processes are inferior. Fuentevilla discusses "feed forward" and "feed backward" processing, as discussed above. Thus, Fuentevilla is in this sense a batch process, in that there is forwards and backwards processing until the entire batch is satisfactorily (according to Fuentevilla anyway) processed.

Such processes of Fuentevilla do not carry with them the advantages of even and continuous flow, such as those of those of the subject invention.

Furthermore, Fuentevilla states that the speed of the transfer pump increases with the intensity of the signal from the previous vessel when the previous vessel is over-filled. That is the problem being addressed by Fuentevilla. Again, Fuentevilla was trying to minimize the size of the apparatus in order to minimize set-up costs (that is, larger units are

more expensive). Distasteful, non-uniform end product is not even identified as a problem by Fuentevilla, so it could not possibly provide what the subject application now provides as means for addressing those problems and improving the end product, for example.

Fuentevilla likewise does not appear to even mention the term "emulsion" or "emulsification." Claims 1 and 74 specify a maximum emulsification level, and claim 74 specifies that emulsification is minimized.

Clearly, the problems addressed by the subject invention as claimed were not even identified by Fuentevilla. Fuentevilla is not subject to modification in such a way that would arrive at the subject invention. Modifying Fuentevilla to remove its bi-directional processing would destroy its operability (to process a batch without overfilling). Such modification is impermissible under *In re Spornoble* (CCPA (1969)). Fuentevilla accordingly could not teach one how to address problems of over- and/or under-processing of the raw material if the problems were not even identified by Fuentevilla. Furthermore, Fuentevilla was simply not subject to modification in such a way that *could* address such problems.

Again, what is claimed in the present application is significantly different from what is taught or suggested by Fuentevilla. For example, Fuentevilla teaches processing using altered speed and direction. This would cause harsh sheering and a distasteful product. Such flow is not "even and continuous."

As the independent claims are non-obvious over Fuentevilla, the same should be true for the dependent claims.

In light of all the foregoing, the withdrawal of this obviousness rejection, over Fuentevilla, is respectfully requested.

Response to the remaining rejections under 35 U.S.C. § 103

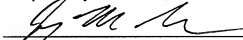
Claims 13 and 15, 9 and 10, and 16 and 19 stand rejected in light of Fuentevilla taken (in various combinations) with DE 2526879, FR 2352498, U.S. Patent 3,116,682 (MacKenzie), and/or U.S. Patent 3,245,759 (Eweson).

Again, and for reasons discussed in more detail above, as the independent claims are non-obvious over Fuentevilla, the same should be true for the dependent claims. Thus, the withdrawal of the remaining obviousness rejections, over Fuentevilla taken in various combinations with the other references, is respectfully requested.

CONCLUSION

The applicants believe that this application is in the condition for allowance, and such action is respectfully requested. The fees pursuant to 37 C.F.R. § 1.17(a)(2), for a one-month extension of time is paid via Deposit Account No. 02-0390. The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account 02-0390. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below to expedite prosecution.

Respectfully submitted,



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